

WHAT IS CLAIMED IS:

1. An system comprising a first system management controller to negotiate with other system management controllers to determine the first system management controller's initial operational mode.
2. The system of claim 1 further comprising firmware instructions to be executed by the first system management controller to negotiate with other system management controllers to determine the first system management controller's initial operational mode.
3. The system of claim 2, wherein the first system management controller includes an input/output port to send messages that comply with the Intelligent Platform Management Interface specification to negotiate with other system management controllers to determine the first system management controller's initial operational mode.
4. The system of claim 3, wherein the first system management controller further comprises a second input/output port to send a duplicate copy of system management messages to the other system management controllers.

1 5. The system of claim 1, wherein available operational modes for the first system  
2 management controller include active baseboard management controller mode,  
3 standby baseboard management controller mode, and satellite management  
4 controller mode.

1 6. The system of claim 1, wherein the negotiation with other system management  
2 controllers is based at least in part on one of controller mode capability, user  
3 configured preference, module type, and geographical address.

1 7. A machine-readable medium having stored thereon instructions to be executed by  
2 a first system management controller to perform a method comprising:  
3 sending a message from the first system management controller to other  
4 system management controllers; and  
5 determining an initial operational mode of the first system management  
6 controller based upon whether the first system management controller receives a  
7 response to the message and, if a response is received, based upon the content of  
8 the response that is received.

1 8. The machine-readable medium of claim 7, wherein the method to be performed  
2 further comprises:  
3 receiving a message from a second system management controller; and  
4 sending a response to the second system management controller that is  
5 based at least in part on the current state of the first system management  
6 controller.

1 9. The machine-readable medium of claim 8, wherein the response to the second  
2 system management controller is also based at least in part on the controller mode  
3 capability of the first system management controller.

1 10. The machine-readable medium of claim 9, wherein the response to the second  
2 system management controller is also based at least in part on a user-configured  
3 mode preference.

1 11. A machine-readable medium having stored thereon instructions to be executed by  
2 a first system management controller, the instructions which, when executed,  
3 cause the first system management controller to:  
4 transition from a reset to a request state; and  
5 send a controller mode request to other system management controllers to  
6 determine an initial operational mode.

1 12. The machine-readable medium of claim 11, wherein the instructions also include  
2 instructions to cause the system management controller to:

3 determine that a mode request has been received from a second system  
4 management controller;

5 send a wait response to the second system management controller if the  
6 second system management controller has a lower priority than the first system  
7 management controller and the first system management controller is in either a  
8 request state or a wait state; and

9 send a wait response to the second system management controller if the  
10 second system management controller has a higher priority than the first system  
11 management controller and the first system management controller is in either an  
12 active baseboard management controller state or a standby baseboard management  
13 controller state.

1 13. The machine-readable medium of claim 12, wherein the instructions also include  
2 instructions to cause the system management controller to:

3 determine the relative priority of the first system management controller  
4 and second system management controller based on at least one of controller  
5 mode capability, user-configured preference, module type, and geographical  
6 addresses.

1 14. The machine-readable medium of claim 12, wherein the instructions also include  
2 instructions to cause the first system management controller to send one of a wait  
3 response and a go to satellite management controller mode response to the second  
4 system management controller if the second system management controller has an  
5 equal or lower priority than the first system management controller and the first  
6 system management controller is in either an active baseboard management  
7 controller state or a standby baseboard management controller state.

1 15. The machine-readable medium of claim 12, wherein the instructions also include  
2 instructions to cause the system management controller to:

3 determine that no response should be sent to the second system  
4 management controller if the second system management controller has a higher  
5 priority than the first system management controller and the first system  
6 management controller is in either a request state or a wait state; and

7 determine that no response should be sent to the second system  
8 management controller if the first system management controller is in a satellite  
9 management controller state.

1 16. A method for determining a baseboard management controller mode, the method  
2 comprising:

3 sending mode requests from a plurality of system management controllers  
4 in a computer system to other system management controllers in the computer  
5 system; and

6 determining one of the system management controllers to be a baseboard  
7 management controller based on the absence of a response to a mode request sent  
8 by that system management controller.

1 17. The method of claim 16, wherein the method further comprises sending from a  
2 first of the system management controllers a response to a mode request received  
3 from a second of the system management controllers, wherein the response by the  
4 first management controller is based at least in part upon a negotiation protocol  
5 state of the first system management controller.

1 18. The method of claim 17, wherein the response by the first management controller  
2 is based at least in part upon the relative priority of the first and second system  
3 management controllers.

1 19. The method of claim 18, wherein the priority is based on at least one of a  
2 controller mode capability, a user preference, a controller's module type, or a  
3 controller geographical address.

1 20. The method of claim 19, wherein controller geographical address is the last factor  
2 considered in determining priority.

1 21. The method of claim 17, wherein the mode requests and responses are sent as  
2 messages that comply with the Intelligent Platform Management Interface  
3 specification.

1 22. The method of claim 17, wherein the method further comprises determining the  
2 mode of the second system management controller based at least in part on the  
3 content of the response.

1 23. The method of claim 16, wherein the method is performed as part of a controller  
2 initiation processes.

1 24. The method of claim 16, wherein there is an absence of a response to a mode  
2 request if a threshold number of requests have been sent by the controller without  
3 receiving a response within a timeout period.

1 25. The method of claim 24, wherein a system management controller that does not  
2 receive a response to a controller mode request within a time-out period retries the  
3 request at least once before determining that the system management controller is  
4 to be the baseboard management controller.

1      26.      The method of claim 16, wherein the mode requests contain information relating  
2                      to the operational modes in which the controller sending the request is capable of  
3                      operating.

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